## **Enterprise Level Technical Architecture Profile (TV-1) Overview**

#### **DoD Policies**

- Accessibility of DoD Web Sites to People with Disabilities - ASD memo 21 Jul 00
- DoD Web Site Administration Policy -DepSecDef memo 26 Apr 01

#### **TMA Guidance**

- MHS Minimum Notebook Configuration Guidance - TMA memo 22 July 02
- MHS Operating Systems Guidance TMA memo 22 July 02
- MHS Minimum Server Hardware Requirements -TMA memo 25 Jan 02
- MHS Office Automation Guidance TMA memo 25 Jan 02
- MHS Personal Computer Hardware Requirements - TMA memo 25 Jan 02
- Guidance for MHS Video Teleconference Standards - TMA memo 14 Jan 02
- Communications Bandwidth Management TMA memo 7 May 01

#### **Information Processing Standards**

- User Interface Services POSIX C903 X Window System Protocol
- User Interface Services Win32 Win32 Application Program Interface (API) set
- Data Management Services SQL and SQL Call Level Interface, and ODBC standards
- Document Interchange SGML, HTML, XML standards, and Common Document Interchange formats
- Graphics Data Interchange JPEG File Interchange Format v1.02 and Graphics Interchange Format (GIF) v89a standards
- Geospatial Data Interchange FIPS PUB 10-4 Countries, Dependencies, Areas of Special Sovereignty, and Their Principal Administrative Divisions standard
- Data Interchange Storage Media ISO 9660 CD-ROM Volume and Structure standard
- **Graphic Services** ANSI Computer Graphics Interfacing Techniques standard
- Operating System Services Win32 APIs and POSIX (UNIX) standards
- Internationalization Services ISO/IEC 8859 Graphic Character Sets - Part 1: Latin Alphabet No. 1 and ISO/IEC 10646-1 Universal Multiple-Octet Coded Character Set standard
- Remote Procedure Computing Open Group Distributed Computing Environment (DCE) v1.1 standards: Time Services Specification; Authentication and Security Services; Directory Services; and Remote Procedure Call standard

### **Information Technology Standards**

 DII COE - Integration and Run Time Specification (I&RTS)

#### Information Transfer Standards

- Host Standards IETF Requirements for Internet Hosts standard
- Electronic Mail IETF Simple Mail Transfer Protocol (SMTP), Standard Format for ARPA Internet Text Messages, and MIME standard
- Directory Services IETF Lightweight Directory Access Protocol and Domain Name System standards
- File Transfer IETF File Transfer Protocol (FTP)
- Remote Terminal IETF TELNET Protocol
- Network Time Synchronization IETF Network Time Protocol Specification (version 3)
- Configuration Information Transfer IETF Dynamic Host Configuration Protocol (DHCP)
- Web Services IETF HTTP and URL standards
- Connectionless Data Transfer MIL-STD-2045-47001B Connectionless Data Transfer Application Layer standard
- Transport Services IETF Transmission Control Protocol (TCP), Internet Protocol (IP), User Datagram Protocol (UDP), and Open Systems Interconnection (OSI) Service standard
- Video Teleconference Services ITU standards
- Facsimile Services EIA/TIA 465A Group 3 Analog Facsimile standard
- Network Services IETF Internetworking (Router) standards, Internet Protocol (IP) standards, and Interior & Exterior Router standards
- LAN Access ISO Ethernet 10BASE-T, IEEE 802.3u 100BASE-T, IETF IP Datagram, and IETF Address Resolution standard
- Point-to-Point Standards IETF Full Duplex, Synchronous, Asynchronous, and EIA/TIA Serial Line Communications standards
- Integrated Services Digital Network ANSI Physical Layer, Data-Link, Signaling and ITU and DISA Addressing standards
- Asynchronous Transfer Mode (ATM) Services -ATM Forum Physical layer, User-Network, Traffic Management, and related ITU standards
- Gigabit Ethernet Service IEEE 802.3 and 802.2ab Ethernet for LAN and MAN applications
- Transmission Media MIL-STD-188-110A Data Modem and ANSI SONET standards
- Data Communications Management Simple Network Management Protocol and Management Information Base standards
- Telecommunications Management ANSI, ITU, and ISO standards

### **Information Security Standards**

- Application Software Entity Security DoD 5200.28-STD Trusted Computer System Evaluation Criteria (the 'Orange Book'): NCSC-TG-021 Trusted DBMS Interpretation; FIPS PUB 73 Computer Applications Security; FIPS PUB 113 Data Authentication standard
- Data Management Services NCSC-TG-021
   Trusted DBMS Interpretation and FIPS PUB 41
   Guide for Implementing the 1974 Privacy Act
- Operating System Services Security DoD 5200.28-STD Orange Book
- Security-Auditing and Security-Alarm Reporting
   DoD 5200.28-STD Orange Book and ISO 101648 OSI Systems Management standard
- Authentication Security IETF Kerberos Network Authentication Service; FIPS PUB 112 Password Usage; FIPS PUB 181 Automated Password Generator; IETF One-Time Password System; CSC-STD-002-85 DoD Password Management Guidance; and IETF Remote Authentication Dial-In User Service (RADIUS) standard
- Host Security FIPS PUB 140-1 Security
   Requirements for Cryptographic Modules and
   FORTEZZA Interface Control Document standard
- Security Algorithms FIPS PUB 46-3 Data Encryption Std (Triple DES); FIPS PUB 180-1 Secure Hash Algorithm; FIPS PUB 186-1 & -2 Digital Signature Std; FIPS PUB 185 SKIPJACK Algorithm; and R21-TECH-23-94 Key Exchange Algorithm
- Security Protocols MIL-STD-2045-48501
  Common Security Label; FIPS PUB 188 Standard
  Security Label for Information Transfer; ITU-T
  X.509 The Directory: Authentication Framework;
  IETF S/MIME Message Specification v2; SDN.903
  SDN System Key Management Protocol; FIPS
  PUB 161-2 EDI; and IEEE 802.10c Interoperable
  LAN/MAN Security Key Management
- Evaluation Criteria Security ISO 15408:1999
   Common Criteria:DoD 5200.28-STD Orange Book;
   NCSC-TG-005 Trusted Network Interpretation; and
   FIPS PUB 48 Guidelines on Eval. of Techniques
   for Automated Personal ID
- Network Security NCSC-TG-005 Trusted Network Interpretation; FIPS PUB 74, 81 and 83 standards related to DES usage; FIPS PUB 140-1 Security Requirements for Cryptographic Modules;
- Cryptography FIPS PUB 46-3 DES and FIPS PUB 180-1 Secure Hash Algorithm
- Firewall, VPN and Intrusion Detection Traffic Filtering Firewall for Low Risk Environments, Application-Level Firewall, VPN, and Intrusion Detection Protection Profiles
- Web Security Secure Sockets Layer (SSL) Protocol (v3.0)

# Information Modeling, Metadata, and Information Exchange Standards

- Activity Modeling IEEE 1320.1 Functional Modeling Language - Syntax and Semantics for IDEFO standard
- Data Modeling FIPS PUB 184 Integration Definition for Information Modeling, IDEF1X
- DoD Data Model Implementation DoD Manual 8320.1, DoD Data Standardization Procedures
- DoD Data Definitions DoD Manual 8320.1;
   Defense Data Dictionary System; and DoD Date Standards - Calendar, Ordinal, and Year
- Binary Floating-Point Data Interchange IEEE standard for Binary Floating-Point Arithmetic
- Object Modeling OMG Unified Modeling Language Specification v1.3

## Human-Computer Interface (HCI) Standards

- Windows Style Guide Microsoft Windows Interface Guidelines for Software Design
- Domain-Level Style Guides User Interface Specification for DII
- System-Level Style Guides ISO 13407 Human-Centered Design Processes for Interactive Systems

## **Combat Support Information Standards**

- Product Data Interchange ANSI/AIM-BC1
  Uniform Symbology Specification Code 39
- Electronic Data Interchange ANSI ASC X.12 Electronic Data Interchange standard (as profiled by FIPS PUB 161-2)

#### **Medical Information Standards**

- Medical Electronic Data Interchange Health Level Seven (HLT) Application Protocol for Electronic Exchange in Healthcare Environments, version 2.2, 2.3, and 2.3.1 standards
- Retail Pharmacy Claims EDI NCPDP Telecommunication v3.2 standard
- Medical Still-Imagery Data Interchange Digital Imaging and Communications in Medicine (DICOM), v3.0 standard
- Medical Information Exchange Standards -ISBT 128 Bar Code Symbology and Application Specification for Labeling Whole Blood and Blood Components and Universal Product Number System standard (for identifying medical and surgical products in supply chain)